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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,425	04/16/2004	Sung Yup Lee	2950-0288P	9940
2292 7590 12/14/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER SHEN, KEZHEN	
			ART UNIT	PAPER NUMBER
			2627	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/825,425	Applicant(s) LEE, SUNG YUP	
	Examiner Kezhen Shen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 9/4/07.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 12-14, 19 and 21-22 are rejected under 35 U.S.C. 102(b) as being unpatentable by Kurobe et al. (hereinafter Kurobe) 2002/0131350.

Regarding claim 1, Kurobe teach a method for controlling a maximum access speed of an optical disc, comprising the steps of: a) identifying unique property information of a loaded optical disc ([0137] the TOC is read from the optical disc); and b) controlling a maximum speed of the optical disc according to the identified unique property information of the optical disc ([0137] the maximum writing speed is determined from the information read off the TOC).

Regarding claim 2, Kurobe teach the method as set forth in claim 1, wherein at the step (a), the unique property information of the optical disc includes disc maker information ([0137] the maker).

Regarding claim 5, Kurobe teach the method as set forth in claim 1, further comprising the step of: c) determining a type of the optical disc, prior to performing the step (a), wherein the step (c) determines whether or not the optical disc is a one-time recordable CD-R ([0137] the type of the optical disc is determined by the ATIP code).

Regarding claim 12, Kurobe teach a method for controlling a speed of a disc, the method comprising: (a) determining a type of a loaded disc ([0137] disc type is identified) (b) determining a maker of the disc if the step (a) determines that the loaded disc is of a prescribed disc type ([0137] disc maker is identified); and (c) varying a speed of the disc according to the determined make of the disc ([0137]-[0138] a table is stored in memory which has maximum write speeds according to disc maker and type).

Regarding claim 13, Kurobe teach the method as set forth in claim 12, wherein the step (b) is performed if the step (a) determines that the type of the disc is a CD-R ([0137] the type of the optical disc is determined by the ATIP code).

Regarding claim 14, Kurobe teach the method as set forth in claim 12, further comprising: (d) prestoring a list of possible disc makers for each disc type, and speed control information associated with each of the list of disc makers (Fig. 6 and [0137]-[0138] a table is stored in memory).

Regarding claim 19, Kurobe teach an apparatus for controlling a speed of a disc, the apparatus comprising: first means for determining a type of a loaded disc ([0137] disc type), second means for determining a maker of the disc if the first means determines that the loaded disc is of a prescribed disc type ([0137] maker); and third means for varying a speed of the disc according to the determined maker of the disc ([0137] a table of disc type and maker is used to determine the maximum writing speed).

Regarding claim 21, Kurobe teach the method as set forth in claim 1, wherein in the step (a), the unique property information of the optical disc includes disc ID information ([0137] ATIP code includes disc ID information).

Regarding claim 22., Kurobe teach the method as set forth in claim 1, wherein the step (a) is performed if the loaded optical disc is determined to be of a prescribed disc type ([0137] the disc type).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurobe et al. 2002/0131350. as applied to claim 1 above, and further in view of Applicant's admitted related art.

Regarding 3 claim, Kurobe fail to teach the method as set forth in claim 1, wherein at the step (b), the maximum speed is controlled by subtracting a predetermined speed from an initial allowable maximum speed of an optical disc apparatus by referring to maximum speed control information for each disc maker stored in a memory of the optical disc apparatus. However, Applicant's admitted art discloses this process (Applicant's admitted related art [0008]).

Therefore, one of ordinary skill in the art would be motivated to include the process of lowering the allowable maximum access speed (Applicant's admitted related art [0008], lowering the allowable maximum access speed of the optical disc apparatus by subtracting a predetermined data reading/writing speed from it, and apply the lowered access speed to the disc speed.) in the maximum access speed control information (Kurobe [0137] and Fig. 6 the maximum writing speed table).

5. Claims 4, 7-8, 10-11, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurobe et al. 2002/0131350, as applied to claim 1 above, and further in view of Mau et al. (hereinafter Mau) US 6,469,967 B1.

Regarding claim 4, Kurobe fail to teach the method as set forth in claim 1, wherein in the step (b), the controlled maximum speed is a maximum playback speed of the optical disc during a reading of data recorded on the optical disc. However, Mau discloses this (Col. 8 Lines 32-38).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of Kurobe and Mau to link the maximum speed to the maximum playback speed of the optical disc for the benefit of reading the optical disc at the maximum speed.

Regarding claim 7, while Kurobe teach the method for controlling a maximum speed of an optical disc, comprising the steps of: (a) determining a type of a loaded optical disc; and (b) controlling a maximum speed of the optical disc, if the step (a) determines that the optical disc is of a certain disc type. Kurobe fail to teach the

controlling of the maximum speed according to a user input. However, Mau does (Col 7 Lines 40-53).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of controlling the maximum speed with predetermined data stored in memory by Kurobe with the teachings of controlling the maximum speed with user's input by Mau to apply user's input as a method of controlling the maximum speed for the benefit of allowing the user to choose between faster burn rates or lower power consumption.

Regarding claim 8, Kurobe teach the method as set forth in claim 7, wherein in the step (b), if there is no user input, the maximum speed is decelerated to be equal to a predetermined speed ([0137] without user input the predetermined speed is the speed stored in memory).

Regarding claim 10, Kurobe fail to teach the method as set forth in claim 7, wherein at the step (b), the controlled maximum speed is a maximum playback speed of the optical disc during a reading of data recorded on the optical disc. However, Mau discloses this (Col. 8 Lines 32-38).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of Kurobe and Mau to link the maximum speed to the maximum playback speed of the optical disc for the benefit of reading the optical disc at the maximum speed.

Regarding claim 11, while Kurobe teach the method as set forth in claim 7, wherein at the step (b), the maximum speed is varied according to disc maker information ([0137] without user input the predetermined speed is the speed stored in memory). Kurobe fail to teach a no user input determination step. However, Mau does

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(Col 7 Lines 52-60 a value is predetermined for the user and does not require user's input).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of varying maximum speed based on disc maker information by Kurobe with the teachings of setting a predetermined speed when there is no user input by Mau to allow the user the option of not inputting a write speed and set the write speed to the maximum speed based on disc maker information for the benefit speeding up the initialization process before burning the optical disc.

Regarding claim 15, while Kurobe teach a method for controller a speed of a disc, the method comprising: (a) determining a type of a loaded disc. Kurobe fail to teach steps (b) determining if there is a user input for setting a speed of the disc, if the step (a) determines that the loaded disc is of a prescribed disc type; and (c) varying the speed of the disc according to the user input. However, Mau teach steps (b) and (c) (Col 7 Lines 39-56 a menu is presented to the user to determine if the user wants to adjust the write speed then the write speed is set according to user's input).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of controlling the maximum speed with predetermined data stored in memory by Kurobe with the teachings of controlling the maximum speed with user's input by Mau to apply user's input as a method of controlling the maximum speed for the benefit of allowing the user to choose between faster burn rates or lower power consumption.

Regarding claim 16, Kurobe fail to teach the method as set forth in claim 15, further comprising; (b) varying the speed of the disc to one fixed speed if the step (b)



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determines that there is no user input. However, Mau does (Col 7 Lines 52-60 a value is predetermined for the user and does not require user's input).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of varying maximum speed by Kurobe with the teachings of setting a maximum speed when there is no user input by Mau to allow the user to skip the step of inputting a write speed for the benefit speeding up the initialization process before burning the optical disc.

Regarding claim 17, Kurobe teach the method as set forth in claim 15, further comprising: (e) varying the speed of the disc according to disc maker information of the disc (Kurobe [0137]). However, Kurobe fail to teach the step (e) when the determination step (b) finds no user input. Mau teach the step of having a set value when the user does not input a specific write speed (Col 7 Lines 53-60).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of setting a speed of the disc according to disc maker information by Kurobe and setting a value of write speed when there is no user input by Mau to create a method of setting the write speed of the disc drive by the disc maker information when there is no user input for the benefit speeding up the initialization process before burning the optical disc.

Regarding claim 18, Kurobe teach the method as set forth in claim 17, further comprising: (f) prestoring a list of possible disc makers for each disc type, and speed control information associated with each of the list of disc makers (Kurobe Fig. 6 and

[0137] a table of write speed based on maker information), whereby the step (e) is performed based on the prestored information.

Regarding claim 20, while Kurobe teach an apparatus for controller a speed of a disc, the apparatus comprising: first means for determining a type of a loaded disc (Kurobe [0137]). Kurobe fail to teach second means for determining if there is a user input for setting a speed of the disc, if the first means determines that the loaded disc is of a prescribed disc type and third means for varying the speed of the disc according to the user input. However, Mau teach the second and third means (Col 7 Lines 39-56 a menu is presented to the user to determine if the user wants to adjust the write speed then the write speed is set according to user's input).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of controlling the maximum speed with predetermined data stored in memory by Kurobe with the teachings of controlling the maximum speed with user's input by Mau to apply user's input as a method of controlling the maximum speed for the benefit of allowing the user to choose between faster burn rates or lower power consumption.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable Kurobe et al. 2002/0131350 as applied to claim 1 above, and further in view of Liu, US 6,909,675 B2.

Regarding claim 9, Kurobe fail to teach the method as set forth in claim 7, wherein in the step of the maximum speed is controlled to be equal to an allowable maximum speed of an optical disc apparatus by the user's operation of a specified button equipped in the optical disc apparatus. However, Liu teaches a method for

switching an optical disc apparatus to different accessing speeds by only pressing the control button (Liu Col. 1 Lines 34-39).

Therefore, one of ordinary skill in the art is motivated to combine the teachings of Kurobe's optical disc drive and Liu's control button on the optical disc drive for the purpose of placing a button on the optical disc apparatus to vary the access speeds by a user input for the benefit of controlling the access speed of the disc without using a computer program.

### ***Response to Arguments***

7. Although Applicant has amended claims 1-2 and added claim 21, the rejection limitation of "unique property information" is still applicable with respect to the first Office Action due to the broad limitation of "unique property information" rather than the specific limitation of the "manufacturer's information". Further, the arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kezhen Shen whose telephone number is (571) 270-1815. The examiner can normally be reached on Monday - Friday 9:30 am to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kezhen Shen/



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SUPERVISORY PATENT EXAMINER